

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

Dear Refrigerated Beverage Vending Machine Manufacturers and Other Interested Parties:

EPA welcomes your input on the following **Draft 2** specification for ENERGY STAR[®] qualified Refrigerated Beverage Vending Machines. The document outlines the criteria that manufacturers' machines will need to meet to qualify for ENERGY STAR. All manufacturers and other interested parties are encouraged to review the draft specification and provide **comments by November 21, 2003**.

All stakeholder comments received on Draft 1 of the specification were reviewed and considered carefully during the development of Draft 2. Based on these comments and suggestions, the latest draft of the specification incorporates the following major additions and revisions:

SUMMARY OF RESPONSES TO COMMENTS AND CHANGES FROM DRAFT 1 TO DRAFT 2:

- The Draft 2 specification continues to apply to new machines only.
 - It is clear from stakeholder comments that EPA should address the installed base of refrigerated beverage vending machines through a retrofit component of the specification. Including retrofitted machines would increase the market penetration of ENERGY STAR qualifying machines while helping to keep balance in the marketplace. Over the next year, EPA will work closely with manufacturers, beverage companies, bottling companies, Underwriters Laboratories (UL), and other stakeholders to determine the most appropriate way to address the installed base of refrigerated beverage vending machines. While it is EPA's intention to move forward with a specification for new machines, it is our hope that a Version 1.1 amendment, which will include a retrofit component, can be developed by the end of next year. To begin this process, attached is a one-page document containing EPA's initial thoughts for addressing retrofitted machines through ENERGY STAR. All stakeholders are strongly encouraged to submit comments on this document.
- The specification now references ASHRAE Standard 32.1-1997R *Methods of Testing for Rating Vending Machines for Bottled, Canned, and Other Sealed Beverages*.
 - Several comments suggested referencing the revised ASHRAE Standard 32.1-1997R, instead of the original standard, as the revised standard is in the final stages of approval. This change has been made.
 - In correctly referencing the revised standard, the definition of "Standard Product" has been changed so that it is consistent with Section 5 of the revised standard, titled "Vending Machine Capacity." The definition now reads: "The standard product shall be 12 oz (355 ml) cans for machines that are capable of dispensing 12 oz (355 ml) cans. For all other machines, the standard product shall be the product specified by the manufacturer as the standard product."
- The specification now explicitly addresses glass front machines. In addition, manufacturers can test and qualify machines as ENERGY STAR by using one of the two sets of testing parameters listed in ASHRAE 32.1-1997R depending on the UL listing of the machine.


- Several stakeholders commented that EPA should address glass front machines within the specification, since these machines are becoming more prominent in the market. In addition, since most if not all glass front machines are designated by UL as “For Indoor Use Only,” stakeholders questioned whether glass front machines should be tested at the same conditions as machines that may be subjected to the full effects of weathering when they are placed outdoors. According to comments received, a number of glass front machine models could meet the proposed ENERGY STAR performance requirements, but not at the 90°F testing parameters.
- Understanding the differences between machines listed “For Indoor Use Only” and those “Suitable for Outdoor Use,” Draft 2, Section 4 “Test Criteria” now refers to the new testing parameters listed in ASHRAE Standard 32.1-1997R and proposes the following:
 - Machines designated as “Suitable for Outdoor Use” by UL must be tested at $90^{\circ} \pm 2^{\circ}\text{F}$ ($32.2 \pm 1^{\circ}\text{C}$) and $65 \pm 5\%$ relative humidity.
 - Machines designated as “For Indoor Use Only” by UL may be tested at $75 \pm 2^{\circ}\text{F}$ ($23.9 \pm 1^{\circ}\text{C}$) and $45 \pm 5\%$ relative humidity.
- In addition, the specification now includes definitions of “Indoor Vending Machines” and “Outdoor Vending Machines,” referencing UL Standard 541 “Refrigerated Vending Machines.”
- Machines that vend temperature sensitive product, such as milk, may now qualify for ENERGY STAR.
 - Machines designed to vend temperature sensitive product, such as milk, that also meet the requirements in Section 3 of the specification, may now qualify as ENERGY STAR. Please note that the vending operator or machine owner must not enable the refrigeration low power mode of a machine vending milk or risk product spoilage. However, it is EPA’s understanding that these machines could at a future time be used to vend a less temperature sensitive product, such as soda. Therefore, they must still have all low power mode capabilities (e.g., lighting and refrigeration) to ensure the possibility of additional energy savings throughout the life of the machine. It is EPA’s hope that through distributor and host site training efforts, these controls will be used properly to ensure the maximum energy savings without interfering with product sales or freshness.
- The Draft 2 specification continues to use a two-tiered approach.
 - EPA received a comment regarding the use of multiple tiers in the specification. By using a two-tier format, manufacturers can immediately qualify existing machine models while seeing a road map for future design of more energy-efficient machines that could meet the Tier II requirements. To determine whether the Tier II requirements are still reasonable, EPA will revisit this part of the specification one year prior to the Tier II effective date.
- New effective dates for Tier I and Tier II, of January 1, 2004 and January 1, 2007, respectively, are proposed.
 - EPA received a number of comments regarding the 2-year lead-time between Tiers I and II. Specifically, manufacturers stated that more time is needed to design product that would meet the Tier II requirements. The Draft 2 specification now proposes a 3-year lead-time.
 - EPA realizes that there is a relatively short comment period for Draft 2 as well as a short lead-time proposed for the Tier I effective date. This is in response to several manufacturers that have encouraged EPA to move quickly to put the specification in place so that they may begin to qualify their products as ENERGY STAR.
- If manufacturers cannot place the ENERGY STAR label on the front of the machine, the label may now be placed on or next to the machine nameplate.
 - EPA received a number of comments regarding the requirement to place the label on the front of the machine. Some stakeholders felt that placement of the label on the front of the machine is not solely up to the manufacturer and may actually interfere with the intended marketing presentation of the beverage company and product. EPA continues to believe that the ENERGY STAR label should be

placed in a location of highest visibility to the consumer as it is the primary way to build awareness of ENERGY STAR, which in turn serves to benefit all partners. However, we also understand that the host site is not basing their purchasing decision on seeing the label on the machine. Even so, it is important that once the machine is placed on-site, the host site that requested an ENERGY STAR qualified model is assured the energy savings by seeing the label on the actual machine when it is delivered. Therefore, the Draft 2 specification now gives manufacturers the option of placing the ENERGY STAR label either on the front of the machine or on or next to the machine nameplate. EPA may revisit the requirement of placement of the label on the front of the machine during the Tier II performance level review beginning in January 2006.

Thank you in advance for taking the time to review this Draft 2 of the ENERGY STAR specification for refrigerated beverage vending machines. It was a pleasure meeting with many of you during the NAMA Expo in Washington, DC. I look forward to working with you to finalize this specification by the end of this year.

Please send all comments by **November 21, 2003** to me at schmeltz.rachel@epa.gov. Any questions about the Draft 2 specification may also be directed to me via e-mail or phone at (202) 343-9124.

Regards,

A handwritten signature in black ink, reading "Rachel Schmeltz". The signature is written in a cursive, flowing style with a long horizontal line extending from the end.

Rachel Schmeltz
ENERGY STAR Program Manager